



Who has broadband? Comparing 2006 to now

Overview

This classroom activity involves comparing student connection to the Internet in 2006 to now. Students can determine the present day use either by conducting their own survey to collect data or by using the current CensusAtSchool data (using a sample of Australian students from the Random Sampler that compares common questions only). In this activity students are asked to conduct a simple analysis using graphs to describe how access to the internet has changed.

Instructions

The world of computers changes very quickly. The Internet is a good example. Viewing and uploading videos on YouTube is common now, but prior to 2006 YouTube did not exist! Most people didn't have broadband either, so even if YouTube had existed not many could have used it.

Task One: Is it true that most students did not have broadband in 2006?

You can find out using a data sample from the 2006 CensusAtSchool Random Sampler found at <http://www.cas.abs.gov.au/cgi-local/cassampler.pl>. The records of over 112,000 students are in this 2006 database.

- 1.** Get a sample from the random sampler.

Reference year **2006**

Select questions **All**

Sample size **200**

The random sample you get is an Excel spreadsheet of raw data. Question 6 asked "Can the Internet be accessed at your home?" Be careful to ensure you use the sheet with the label **2006**.

- 2.** Count each response in your sample and record it in a table like the one below. You can use [SORT in Excel](#) to order your values.

Type of Internet Access	Number of Students	Percentage of Students
No Internet connection		
Yes - broadband connection		
Yes - dial-up connection		

Yes - other (include Internet access through mobile phone etc)		
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(Hint: It will be easier to count the number of students in each category if you use Excel [SORT](#) for the data first. If you are good at Excel it will be even easier if you use the [COUNTIF](#) function to do the counting for you.)

3. Use a side by side graph to represent data in the table above. This can be easier to understand.

4. Decide if most students had access to Broadband Internet in 2006. You can use the table or graph to help you decide.
Hint: It will be easier to count the number of students in each category if you sort the data first. If you are good at Excel it will be even easier if you use the COUNTIF function to do the counting for you.

Task Two: Do most students have broadband today?

One way to answer this question would be to collect your own data. You could do this by conducting a survey of your own class and recording the data you collect. Use the question exactly as it is written above.

Or you could take a new sample:

Reference year	<i>Current Year</i>
Select questions	All
Sample size	200

You can use the table or side by side graph to help you decide

5. Use your data to prepare a table and side by side graph (**clearly label with the year**) similar to those you prepared for 2006 data. If you use 2008 as a reference year:

6. Decide if most students have access to Broadband Internet today. Your answer will need to refer to your table or graph for reasons.

7. In what way do you think the results would be different if a sample was taken in another two years?

- 8.** The local library is considering installing computers for use by residents in the local area. Do you think that your class results could be used to represent the people who live in your neighbourhood?
- 9.** Describe a sample that could be taken that could better represent yours.

Extension

- 10.** Investigate the access to broadband in your neighbourhood by viewing the latest Census Data. You can do this by using the [Community Profiles](#) from the latest Census.
- 11.** Investigate the trend in Internet access by using the time series [8146.0 - Household Use of Information Technology, Australia](#). These reports have detailed tables, a summary and highlights of the data.
- 12.** Learn more about surveys by playing the [Home Internet Survey](#) game.
You may have to turn up the magnification on your computer to view the activity clearly.